

Fact Sheet



For Draft/Proposed Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02900001-2012 (Part 2 of 3)**
Application Received: **February 22, 2011**
Plant Identification Number: **029-00001**
Permittee: **ArcelorMittal Weirton Inc.**
Mailing Address: **100 Pennsylvania Avenue, Weirton, WV 26062**

Revised: N/A

Physical Location: Weirton, Hancock County, West Virginia
UTM Coordinates: 533.70 km Easting • 4474.50 km Northing • Zone 17
Directions: From US 22 take Exit 2 to WV-2 North to Downtown Weirton. Continue on WV-2 approximately 3 miles. Approaching the 10th traffic light, at Pennsylvania Avenue, turn right into the driveway of the Mill Administration Building.

Facility Description

ArcelorMittal Weirton Inc. operates a steel finishing facility that includes a Strip Mill with steel pickling and cold rolling operations, Tin Mill with tempering and electrolytic plating (tin, and chrome), Hydrogen Plant, and Boilers. Other operations at the facility include an emergency generator, storage tanks, wastewater treatment plants and support/maintenance shops. The facility also includes the following idled operations: Blast Furnaces, Basic Oxygen Plant, Continuous Caster, Sheet Mill, Hydrochloric Acid Regeneration Plant, and two Foster Wheeler Boilers.

For Title V purposes, the facility operations were divided into three parts: Part 1 includes the Boilers and emergency generator, Part 2 includes the steel finishing processes and hydrogen plant, and Part 3 includes the Hot operations. This permit covers Part 2 of the facility and the following sources:

Strip Mill - Reheat Furnaces, Hot Strip Mill, Pickle Line, Tandem Mills, Skin Mill

Acid Plant - HCl Regeneration Units and HCl Storage Tanks

Lime Storage Silos

Tin Mill - Jumbo Anneals, Continuous Annealing Lines, Temper Mills, Chrome and Tin Plating Lines, Roll Shot Blasters, and Anode Shop Melting Pots

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2010 Actual Emissions
Carbon Monoxide (CO)	979.81	81.43
Nitrogen Oxides (NO _x)	2370.55	305.10
Particulate Matter (PM _{2.5})	453.16	19.40
Particulate Matter (PM ₁₀) <i>PM₁₀ is a component of TSP</i>	632.52	29.89
Total Particulate Matter (TSP)	988.74	71.57
Sulfur Dioxide (SO ₂)	11,353.52	18.90
Volatile Organic Compounds (VOC)	83.09	27.58
Hazardous Air Pollutants	Potential Emissions	2010 Actual Emissions
Formaldehyde	1.43	0.188
Hydrochloric Acid	8.4	0.429
Chlorine	3.6	0.000
Chromium	1.36	0.341
Hexane	23.0	3.088
Nickel	2.63	0.030

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, therefore ArcelorMittal Weirton Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM emission limits
	45CSR6	Open burning prohibited
	45CSR7	Manufacturing sources PM emissions limits
	45CSR10	SO ₂ emission limits
	45CSR11	Standby plans for emergency episodes
	45CSR13	Construction Permits
	45CSR30	Operating permit requirement.
	45CSR34	HAPs emission standards
	40 CFR Part 61	Asbestos inspection and removal
	40 CFR Part 63, Subpart CCC	Steel Pickling - HCl Process MACT

	40 CFR Part 63, Subpart DDDDD	Industrial Boiler MACT
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to request any pertinent information such as annual emission inventory reporting is provided in WV Code § 22-5-4(a)(14). The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-0032A	November 8, 2006	
R13-1137	October 26, 1990	CO-SIP-C-2003-28
R13-1310	February 8, 1991	CO-SIP-C-2003-28
CO 6-1978	June 29, 1978	
CO 7-1987	July 17, 1987	
CO 7-1990	July 10, 1990	R13-1137 and R13-1310
CO-SIP-95-2	January 9, 1995	CO-SIP-C-2003-28
CO-SIP-C-2003-28	June 30, 2003	

Conditions from this facility's Rule 13 permits governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permits governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a permit renewal for this facility. The following changes have occurred since the original permit was issued:

Title V Boilerplate changes:

A new Section 1.2 Table was added which lists all the active R13, R14, and/or R19 permits and their date(s) of issuance. The underlying authority for any conditions from R13, R14, and/or R19 permits cite the original permit number in the Title V permit. These changes will eliminate the need to go through the entire Title V permit to change the R13, R14, and/or R19 permit numbers each time an R13, R14, and/or R19 permit is modified. The only required change will be to the Section 1.2 Table.

Conditions 3.1.1. and 3.1.2. were revised because the language in 45CSR§§6-3.1. and 3.2. changed.

Condition 3.1.3. citation was changed because 45CSR15 was repealed and 40 CFR 61 is now incorporated into 45CSR34.

Condition 3.3.1.d. was added.

Conditions 3.5.3. and 3.5.5. were revised to address electronic submittal of the annual certification to the USEPA. The certification shall now only be submitted to the USEPA by e-mail.

Other changes:

Equipment Table:

No. 3 Pickle Line, No. 8 Tandem Mill, Strip Steel Batch Annealing Furnaces, HCl Regeneration Unit 1, Galvanize Lines 3, 4 and 5, and the No. 1 Zinc Plating Line shall not be operated and have been deleted from the equipment table. All references and applicable requirements have been removed from the permit. The PM limit in Condition 5.1.2. and the SO₂ limit in Condition 5.1.5. were recalculated without the Design Heat Input of the Galvanize Lines 3, 4, and 5.

The Hot Strip Mill Cooling Tower, Hot Strip Mill WWTP, and Inhibitor - HCl Tank Farm do not have applicable requirements and have been deleted from the equipment table.

The Lime Storage Silos do have applicable requirements and have been added to the equipment table.

Permit Shield - Condition 3.7.2. was amended. A new paragraph was added to grant a permit shield for the Hydrogen Reforming Facility.

40 CFR Part 63, Subpart DDDDD (Boiler MACT) - On February 21, 2011, EPA signed the final rule for the Boiler MACT. This rule was published in the Federal Register on March 21, 2011 which established the existing source compliance date as March 21, 2014. The 40 CFR Part 63, Subpart DDDDD, placeholder language was included as Condition 4.1.11.

On May 18, 2011, EPA published a Federal Register final rule (76 FR 28662-28664) staying 40 CFR 63, Subpart DDDDD in its entirety along with an indefinite delay of its effective date. This EPA action reads in part:

Issuance of a Stay and Delay of Effective Date

Pursuant to section 705 of the APA, the EPA hereby postpones the effectiveness of the Major Source Boiler MACT and the CISWI Rule until the proceedings for judicial review of these rules are complete or the EPA completes its reconsideration of the rules, whichever is earlier. By this action, we are delaying the effective date of both rules, published in the **Federal Register** on March 21, 2011 (76 FR 15608 and 76 FR 15704). The delay of the effective date of the CISWI Rule applies only to those provisions issued on March 21, 2011, and not to any provisions of 40 CFR part 60, subparts CCCC and DDDD, in place prior to that date. This delay of effectiveness will remain in place until the proceedings for judicial review are completed or the EPA completes its reconsideration of the rules, whichever is earlier, and the Agency publishes a notice in the **Federal Register** announcing that the rules are in effect.

40 CFR 63, Subpart DDDDD will not apply if the facility becomes a non-major source of HAPs prior to the first compliance date. In addition, 40 CFR 63, subpart JJJJJ will not apply to the furnaces which burn gaseous fuels only.

45CSR7 - Conditions in Section 6.1. were revised to include sources that were exempted in the original Title V Permit. 45CSR§7-10.5. exempts sources from section 4.1. that have a potential to emit less than one pound per hour of PM and an aggregate of less than 1000 pounds per year for all such sources of PM located at the stationary source. The Roll Shot Blasters have the potential to emit 16,200 pounds per year, therefore these sources do not meet the exemption of an aggregate of less than 1000 pounds per year for all such sources of PM located at the stationary source.

Duplicate Sources: The Tandem Mills, the Temper Mills, the Weirlite Temper Mills, and the Roll Shot Blasters meet the definition of duplicate sources in 45CSR§7-2.13. and are considered expanded sources since the

installation dates are subsequent to the original equipment's installation date.

The Temper Mills and Wierlite Temper Mills have no stacks and are therefore subject to PM emissions limits as calculated by the equation in 45CSR§7-4.4. as follows:

Equipment Description	W_e (pph)	W_{et} (pph)	R_{et} (pph)	R_e (pph) = $(W_e/W_{et}) * R_{et}$
No. 2 Weirlite Temper Mill	200,000	360,000	43.6	24.2
No. 5 Temper Mill	240,000	480,000	51.6	25.8

The Tandem Mills and the Roll Shot Blasters are duplicate sources with separate stacks and are therefore subject to PM emissions limits as calculated by the equation in 45CSR§7-4.8. as follows:

Equipment Description	W_s (pph)	W_t (pph)	R_t (pph)	R_s (pph) = $R_t * (W_s/W_t)$
No. 9 Tandem Mill	300,000	500,000	53.0	31.8
Roll Shot Blaster 2	24,000	48,000	30.4	15.2

The Chrome and Tin Plating Lines use different methodologies for plating, therefore they were not considered to be duplicate sources. Since the combined Rule 7 sources expect to generate only 2 pph total, visible emissions checks shall be sufficient to demonstrate compliance with the weight emissions limits.

Pickling Lines and Hydrochloric Acid Regeneration - MACT regulations are usually more stringent than state rules and in the original permit, only the MACT regulations were incorporated into the permit. But upon review for the renewal, the lack of visible emissions standards in 40 CFR Part 63, subpart CCC required that Conditions 8.1.5., 8.3.2., and 8.5.2. be added to the permit since the pickling lines and HCl Regeneration Units are subject to the visible emission standards of 45CSR7.

Permit R13-0032 only included installation requirements which were not incorporated into the original Title V permit. However, the amended permit, R13-0032A, now includes operational requirements, which were added to the Title V renewal permit as Conditions 8.1.6. through 8.1.9., 8.3.3., and 8.5.3. through 8.5.6.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

45CSR13 - Permit R13-1137, Specific Requirement A.4. required the permittee to discontinue operations of the two (2) existing vintage slab reheating furnaces, No. 3 and No. 4, upon commencement of operation of the new No. 2 walking beam slab reheating furnace. Permit R13-1310, Specific Requirement A.4. required the permittee to discontinue operations of the two (2) existing vintage slab reheating furnaces, No. 1 and No. 2, upon commencement of operation of the new No. 1 walking beam slab reheating furnace. These requirements have been completed and were not included in the Title V permit.

Permits R13-1137 and R13-1310, Specific Requirement A.7. requires SO₂ emission limitations upon commencement of operation of the Struthers Corporation's Browns Island coke oven battery. The coke oven battery was never constructed, therefore this requirement was not included in the Title V permit.

Civil Consent Decree 5-96-CV-171 - has been terminated in accordance with Section XXXVIII.B. The permittee has certified completion and compliance with all requirements.

40 CFR 60, subparts K, Ka, and Kb - The storage tanks associated with the steel finishing side of the facility are not subject to these subparts. The 6 million gallon fuel oil tank, OB6/1, is the only tank constructed within the time frames, however, its true vapor pressure is 0.0002 psia and it is thus exempt from 40 C.F.R. Subpart

K in accordance with 40 C.F.R. § 60.113(d)(1).

40 CFR 63 Subpart N - NESHAP for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks. Continuous chromium electroplating of steel is different from the chromium electroplating operations regulated in the existing NESHAP standard. USEPA has indicated that they intend for continuous chromium electroplating to be included in this NESHAP, however the rule has not yet been updated.

40 CFR 63 Subpart Q - NESHAP for Industrial Process Cooling Towers. No chromium-based water treatment chemicals are used at the facility.

40 CFR 63 Subpart T - National Emissions Standards for Halogenated Solvent Cleaning. No halogenated solvent cleaning machines exist at the facility.

Polymer Coating Line - A Permit Determination form, dated December 10, 2002, and received by this Office on December 12, 2002 was submitted for the installation of a Polymer coating line. No permit was required based on information received in the Permit Determination form.

Hydrogen Reforming Facility - The Methane Hydrogen Reformer was constructed in 1995 by BOC Gases Division after a Rule 13 permit determination deemed that no permit was necessary. In April 2009, ownership was transferred to ArcelorMittal Weirton, Inc. Since there are no applicable requirements on this equipment, it was not included in the Title V permit.

40 CFR Part 64 - Compliance Assurance Monitoring.

The Tandem Mills and the Chrome and Tin Plating Lines have PM emission limitations but no PM control devices. The control devices are for VOC emissions but there are no VOC emissions limitations for these sources, therefore these sources do not meet the applicability requirements of 40 CFR §§ 64.2(a)(1) and (2).

The Lime Storage Silos and Roll Shot Blasters are not major sources and do not meet the applicability requirement of 40 CFR § 64.2(a)(3).

The Pickling Lines and HCl Regeneration Units are subject to 40 CFR part 63, subpart CCC, and are exempt from CAM in accordance with 40 CFR § 64.2(b)(1)(i).

All other emission sources have no control devices and do not meet the applicability requirements of 40 CFR § 64.2(a)(2).

Greenhouse Gas Permitting - This is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit. Therefore, there are no applicable GHG requirements

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: December 14, 2011

Ending Date: January 13, 2012

All written comments should be addressed to the following individual and office:

Bobbie Scroggie
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

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